Leveraged Financing

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Four Applications of Valuation

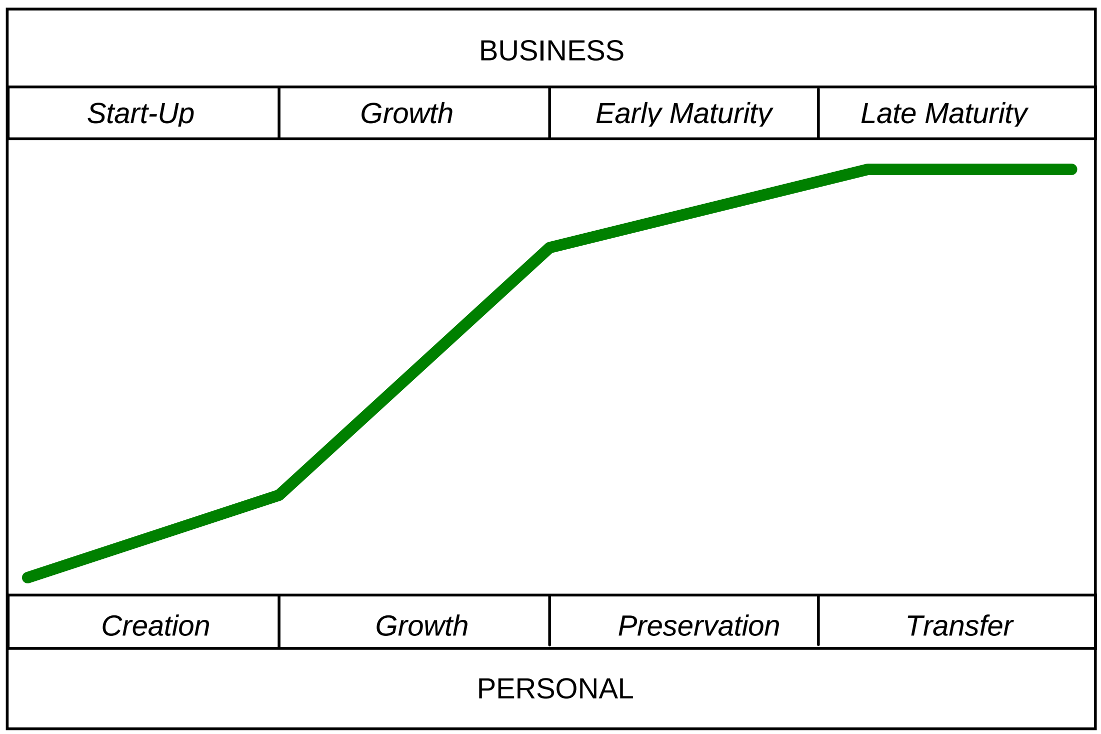
- Business restructuring: breakup value of public companies
- Financial restructuring: before and after
- Mergers and acquisitions
- Valuing a private company

What Does Value Mean? Public vs. Private

- Public Company Valuation
  - maximum share price
- Private Company Valuation
  - maximize after-tax personal income
  - build personal wealth
  - protect wealth from taxes

“Enhance Shareholder Value?”

Depends on Corporate Life Cycle



Managing Value

- Maximize corporate expenses
- Shift income to low-tax bracket family
  - tradeoff payroll taxes if employed
  - better to make family S-corp holders or limited partners
- Own assets privately, lease to company
- Lever company to finance new investments
- Multiple corporations:
  - distribute income and value
  - lower tax bracket

Uses of Private Company Valuation

- Estate planning
- Merger & acquisition
- IPO
- ESOP
- Phantom stock options
- Stock repurchase (buy/sell agreements)
  - First right of refusal
  - Shareholder disputes
- Private equity investments

Private Valuation Concepts

- Corporate value
  - Value of company if acquired whole
- Controlling interest premium
- Marketability (illiquidity) discount
- Minority interest discount
  - "Swing vote": a minority share that effectively controls the company

Private Companies: Typical Valuation Methods

- Book value
- Market comparables
  - earnings multiples
    - **weighted averages of recent earnings**
    - **earnings adjusted for recurring operations**
    - **earnings normalized for related party transactions**
- Prices of prior arm’s-length stock sales
- Discounted cash flow/VC method/LBO

Marketability Discounts

- No market for shares versus public company
- Lacks liquidity unless:
  - do an IPO
  - sell or merge the business
  - sell shares to company or other shareholders
- Flotation costs must be incurred to sell
- Typical range: 15-35%

Minority Interest Discounts

- Cannot influence dividends
  - insecure income stream
- Shareholders have no control
  - can be squeezed-out
  - no influence on Board of Directors
- Typical discount range: 35-50%
  - degree of discount affected by buy/sell agreements, preemptive rights, appraisal rights, employment agreements, etc
  - as specified in shareholders’ agreement

Relationships Between Discounts

Issue 1 → **Issue 2**

Issue 1

Private Company?

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Marketability Discount

15-35%

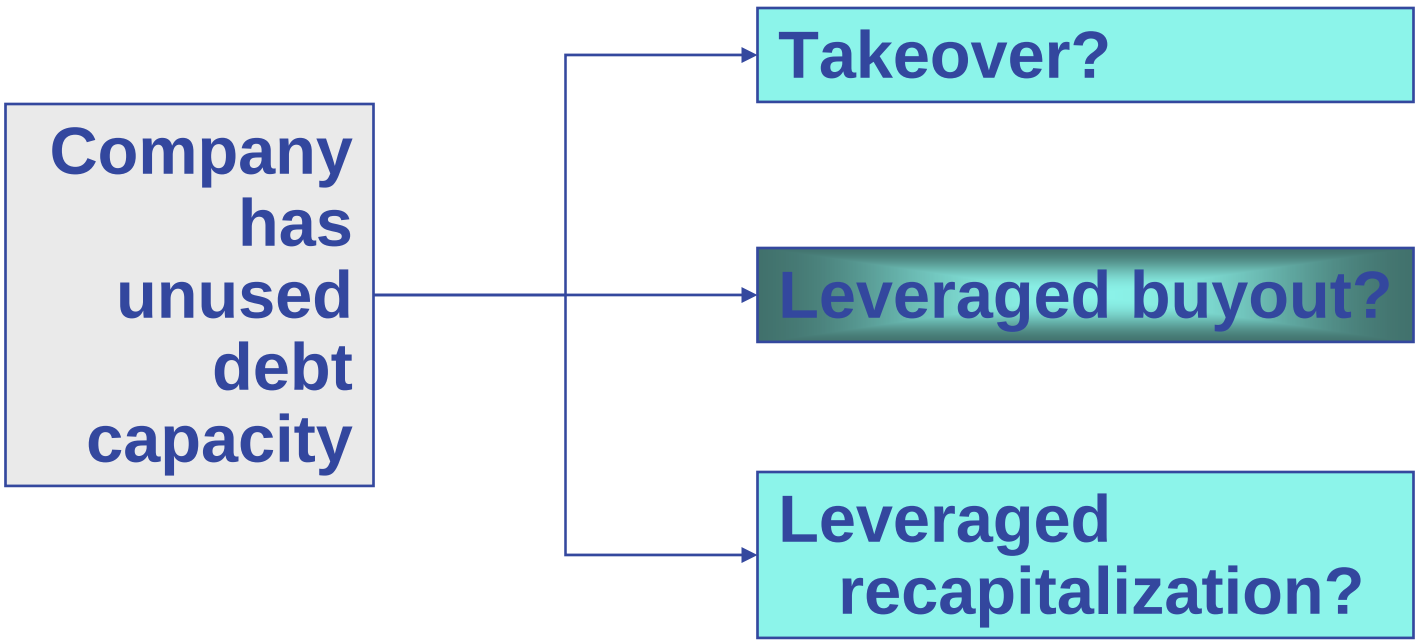
Issue 2

Controlling Interest or Minority Interest?

↓ Control → Control Premium: 20-25%

↓ Minority → Minority Discount: 35-50%

M&A and Leverage



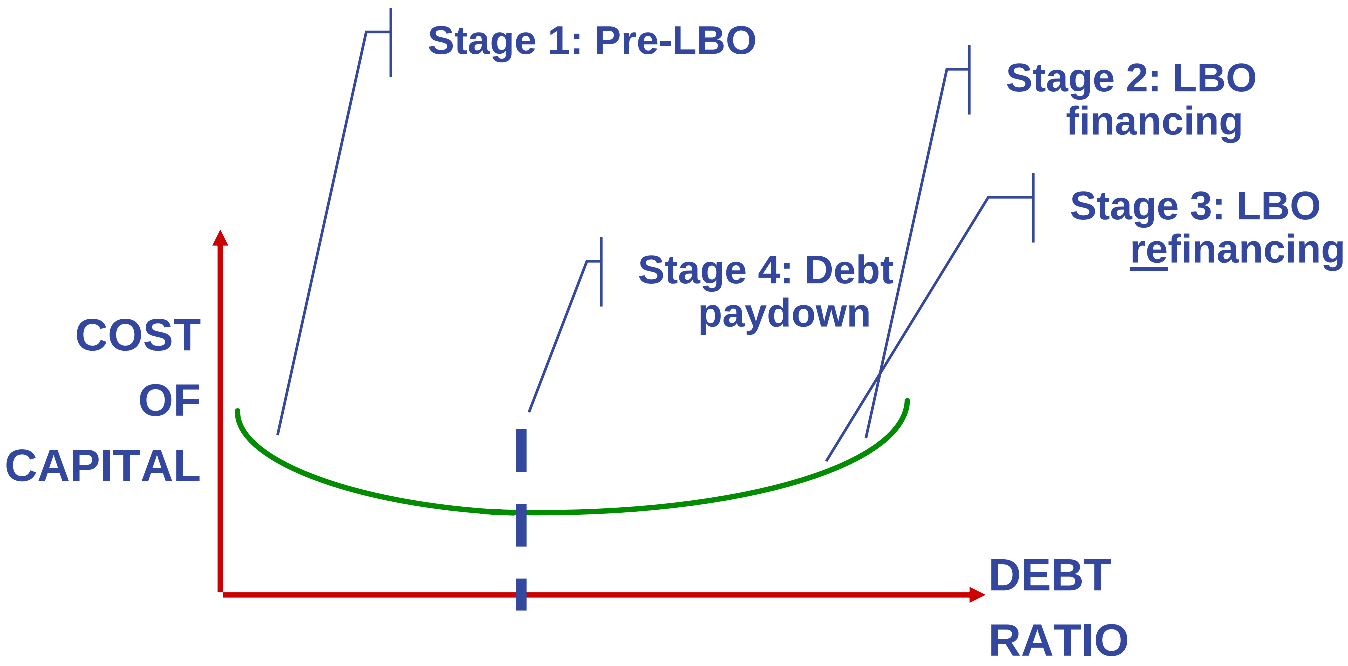
Private Pitfalls

- Methods: same
- Problems:
- No market price
- No history of reported information
- Data provided can be distorted

Private Pitfalls

- Revenue overstated?
- Costs understated? Overstated?
- New costs that will be incurred?
- Intangible value?

LBO: A Temporary Capital Structure



12-Step Method

- Evaluating cost of deal
- Estimating borrowing capacity
- Estimating cash costs of funding
- Estimating growth rates of sales, expenses, etc
- Projecting cash flows (FCFF and FCFE)
- Projecting debt amortization
- Calculating terminal value of FCFE and FCFF
- Estimating costs of capital to find PV
- Making sense of the deal

Cost of the Deal

Estimating cost of deal			
Shares			10
Price			$ 45
Premium			15%
Equity cost			$ 518
Debt cost			$ 55
Fees		5%	$ 29
Capex & restructuring		10%	$ 57
Total cost of deal			$ 658

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Borrowing Capacity

Estimating borrowing capacity			
Given:			
EBIT			$ 95
Min EBIT int coverage ratio			1.3
Interest capacity			$ 73
Interest rate			16.00%
Debt capacity			$ 457

From table

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Capital Structure

Preliminary capital structure			
Debt			$ 457
Missing			$ 177
Mgt equity			$ 25
Total financing			$ 658

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LBO Financing

NEWCO

Cost of purchasing the business	Senior debt $457
	Mezzanine
	Equity $25

What securities?
What returns?
What investors?

Cash Flows and Debt Repayment

Cash Flows and debt repayment

				1	2	3	4	5
NOI	95		5%	$ 99.75	105	110	115	121
Principal		$	457					
Interest	16%			73	55	51	46	40
Tax	35%			9	17	21	24	28
Add depr of	57			11.4	11.4	11.4	11.4	11.4
Less capex	10%			$ 10.0	$ 10.5	$ 11.0	$ 11.5	$ 12.1
Cash avail to repay debt				19	33	39	45	52
Remaining debt				**438**	**405**	**366**	**321**	**269**

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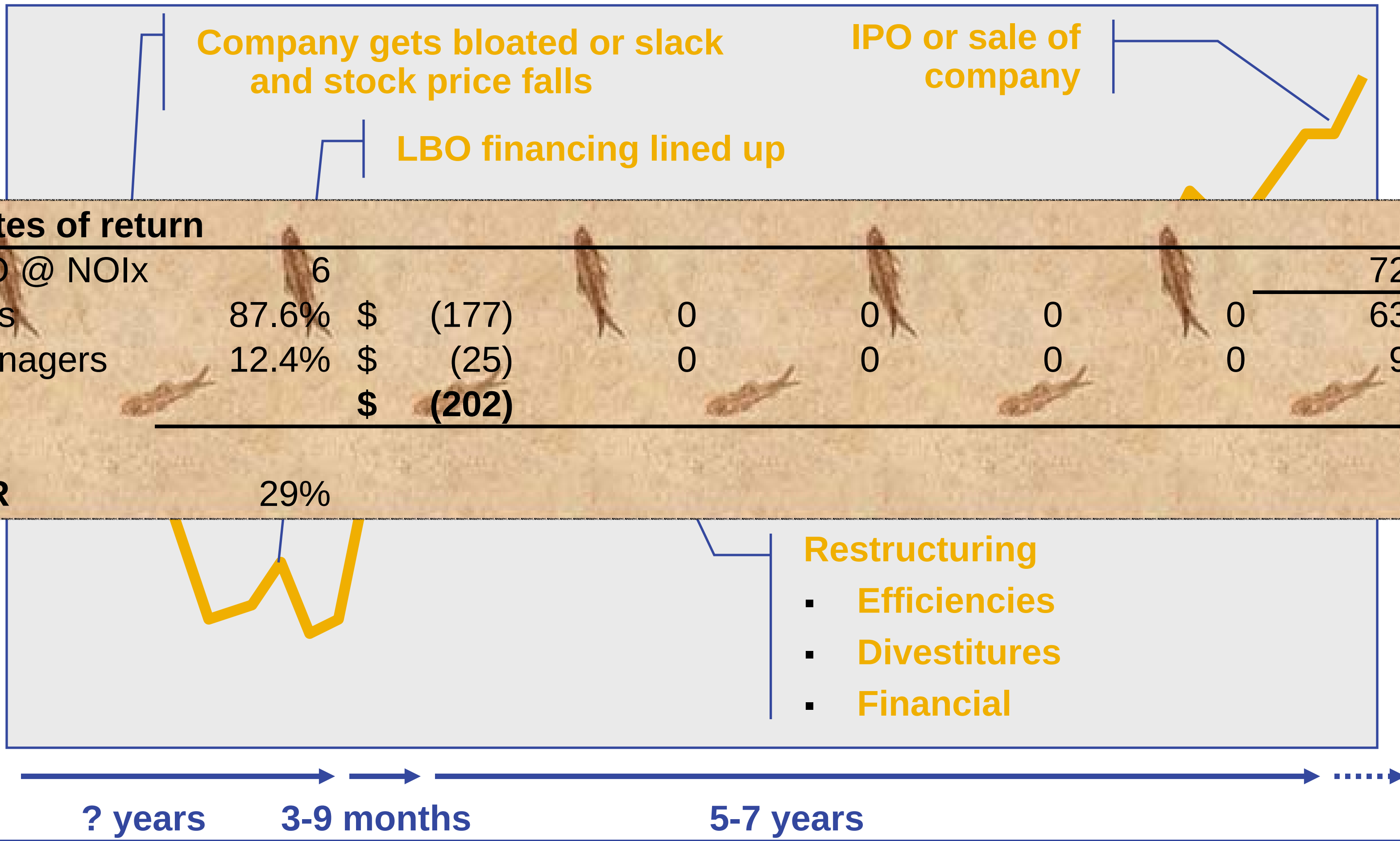
Exit



Rates of return

IPO @ NOIx	6							727
VCs	87.6%	$	(177)	0	0	0	0	637
Managers	12.4%	$	(25)	0	0	0	0	90
		$	**(202)**					
IRR	29%							

Case Study

Photronics

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Flexics

Flexics

- Using what you have learned about M&A valuation, private company valuation and leverage capacity, estimate a range of values for the company
- What should Flexics' owners do?
- What should the LBO team offer?
- What should Photronics offer?